



**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**Communication of Operational Information     )  
Between Natural Gas Pipelines and Electric     )  
Transmission Operators                             )**

**Docket No.   RM13-17-000**

**COMMENTS OF THE  
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION  
IN RESPONSE TO NOTICE OF PROPOSED RULEMAKING**

The North American Electric Reliability Corporation (“NERC”)<sup>1</sup> hereby provides these comments in response to the Federal Energy Regulatory Commission’s (“FERC” or the “Commission”) July 18, 2013, Notice of Proposed Rulemaking (“NOPR”)<sup>2</sup> proposing to revise Parts 38 and 284 of the Commission’s regulations to provide explicit authority to interstate natural gas pipelines and public utilities that own, operate, or control facilities used for the transmission of electric energy in interstate commerce to share non-public, operational information with each other for the purpose of promoting reliable service or operational planning on either the public utility’s or pipeline’s system.

**I.     Introduction**

NERC supports the proposed revisions to Parts 38 and 284 of the Commission’s regulations, as outlined in the NOPR.<sup>3</sup> NERC’s mission is to ensure the reliability of the Bulk Power System (“BPS”) in North America, in part, by developing and enforcing mandatory Reliability Standards. NERC’s reliability mandate is set forth in Section 215 of the Federal

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<sup>1</sup> The Federal Energy Regulatory Commission certified NERC as the electric reliability organization (“ERO”) in its order issued on July 20, 2006, in Docket No. RR06-1-000. *North American Electric Reliability Corporation*, 116 FERC ¶ 61,062 (2006).

<sup>2</sup> *Communication of Operational Information Between Natural Gas Pipelines and Electric Transmission Operators*, 144 FERC ¶ 61,043 (2013)(“NOPR”). All capitalized terms shall have the meaning set forth in the Glossary of Terms Used in NERC Reliability Standards, *available at*: [http://www.nerc.com/files/Glossary\\_of\\_Terms.pdf](http://www.nerc.com/files/Glossary_of_Terms.pdf).

<sup>3</sup> 18 C.F.R. Parts 38 and 284 (2013).

Power Act (“FPA”).<sup>4</sup> NERC’s comments herein focus on electric and gas industry coordination issues solely as they relate to electric reliability.

NERC believes that more comprehensive understanding of the complexity of the BPS is critical for facilitating prompt industry actions that achieve effective overall reliability. NERC’s periodic Reliability Assessments provide a technical platform for important policy discussions related to the challenges facing the interconnected North American BPS. The industry trends identified in NERC’s previous Long-Term Reliability Assessments have highlighted that gas-fired generation is likely to increase significantly to meet growing electric demand and replace retiring coal-fired generation. By identifying the interdependencies and quantifying the risks of such emerging reliability issues, NERC provides risk-based recommendations and supports a learning environment for industry to pursue improved reliability performance.

## **II. Notices and Communications**

Notices and communications with respect to this filing may be addressed to the following:<sup>5</sup>

Thomas Burgess  
Vice President and Reliability Assessment and  
Performance Analysis  
John N. Moura  
Director of Reliability Assessment  
North American Electric Reliability Corporation  
3353 Peachtree Road, N.E.  
Suite 600, North Tower  
Atlanta, GA 30326  
(404) 446-2560  
(404) 446-2595– facsimile

Charles A. Berardesco\*  
Senior Vice President and General Counsel  
Rebecca J. Michael\*  
Associate General Counsel for Corporate and  
Regulatory Matters  
Willie L. Phillips\*  
Senior Counsel  
North American Electric Reliability Corporation  
1325 G Street, N.W., Suite 600  
Washington, D.C. 20005  
(202) 400-3000  
(202) 644-8099– facsimile  
[charlie.berardesco@nerc.net](mailto:charlie.berardesco@nerc.net)  
[rebecca.michael@nerc.net](mailto:rebecca.michael@nerc.net)  
[willie.phillips@nerc.net](mailto:willie.phillips@nerc.net)

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<sup>4</sup> 16 U.S.C. § 824o.

<sup>5</sup> Persons to be included on the Commission’s service list are indicated with an asterisk. NERC requests waiver of 18 C.F.R. § 385.203(b) to permit the inclusion of more than two people on the service list.

### **III. Comments**

#### **A. Background**

On February 15, 2012, the Commission issued a notice in Docket No. AD12-12-000 requesting comments on various aspects of gas-electric interdependence and coordination in response to questions posed by members of the Commission.<sup>6</sup> On March 30, 2012, NERC provided comments pursuant to that notice. FERC subsequently issued a notice inviting comments and establishing a technical conference regarding communications and information sharing issues between natural gas and electric power industry entities. On January 7, 2013, NERC provided comments in advance of the Commission technical conference that was held on February 13, 2013. NERC's comments referenced NERC's December 2011 Special Reliability Assessment report titled "A Primer of the Natural Gas and Electric Power Interdependency in the United States" that included the following Phase I recommendations:<sup>7</sup>

- Future natural gas storage facilities will not only have to satisfy the traditional demands for fuel supply reliability, but it will also have to satisfy the significant and expanding swings in demand for gas that can only be accommodated by high performance, multiple cycle natural gas storage facilities.
- Vital information needed for the reliable operation of the BPS should be shared with system operators from both industries—increased transparency in both markets is needed. Examples include the sharing of maintenance issues (*e.g.*, the pipeline and the generators), new facilities' perceived impact, load levels, dispatch principles and general patterns or forecasts for both industries.

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<sup>6</sup> *Coordination Between Natural Gas and Electricity Markets*, Docket No. AD12-12-000 (Feb. 15, 2012) (Notice Assigning Docket No. and Requesting Comments) (*available at*: <http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12893828>). *See also* Commissioner Philip D. Moeller, *Request for Comments of Commissioner Moeller on Coordination between the Natural Gas and Electricity Markets* (Feb. 3, 2012), *available at*: <http://www.ferc.gov/about/com-mem/moeller/moellergaselectricletter.pdf>; and Commissioner Cheryl A. LaFleur, *Statement regarding Standards for Business Practices for Interstate Natural Gas Pipelines* (Feb. 16, 2012), *available at*: <http://www.ferc.gov/media/statements-speeches/lafleur/2012/02-16-12-lafleur-G-1.asp>.

<sup>7</sup> *See* NERC 2011 Special Reliability Assessment: A Primer of the Natural Gas and Electric Power Interdependency in the United States, at 96, *available at*: [http://www.nerc.com/files/Gas\\_Electric\\_Interdependencies\\_Phase\\_I.pdf](http://www.nerc.com/files/Gas_Electric_Interdependencies_Phase_I.pdf).

- Communications between two industries are hampered by the incompatibility between the traditional gas day, traditional electric day, and the market day (in market areas), which increases the difficulty of the gas industry in providing the needed services to its largest consumers. Contracting practices also make it difficult to plan the flexibility needed for both industries' reliable operation. A coordinated approach for engaging the two industries to come together and develop compromising solutions to address communication strategies, operational changes, and tariff changes is critical. The two industries must reconcile the divergent views such as firm contracting needed to build new pipeline capacity and how to secure day-to-day delivery of gas.
- Vulnerabilities should be identified. Mitigating strategies should be incorporated into the planning and operation procedures for both industries. The electric industry should evaluate which generators may be most susceptible to pipeline disruptions (*e.g.*, number of pipelines serving the generator, proximity to gas storage, and location relative to pipeline). The gas pipeline industry should consider electric system generation forecasts during the planning process. For operations, the sharing of real-time system information by both industries increases the ability for each to make informed decisions and reduce overall risk.<sup>8</sup>

In formulating its comments in response to the NOPR, NERC refers to its May 2013 Special Reliability Assessment report titled “Accommodating an Increased Dependence on Natural Gas for Electric Power, Phase II: A Vulnerability and Scenario Assessment for the North American Bulk Power System.”<sup>9</sup> Phase II recommendations from this special assessment include:

- Long and Short-Term Planning Summary:
  - Risk-based approaches are needed to study the impact and regional challenges associated with an increasing dependence on natural gas.
  - Enhancements to reliability and resource assessments should reflect risks to gas-fired generation as a result of various fuel disruptions.
  - Regional solutions will likely include a mix of mitigating strategies, increased gas and/or electric infrastructure, and dual or back-up fuel capability.
  - Enhancements to data sharing and planning coordination can provide insights through additional studies and scenario analysis.

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<sup>8</sup> *Id.* at 2.

<sup>9</sup> *Available at:*

[http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC\\_PhaseII\\_FINAL.pdf](http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_PhaseII_FINAL.pdf).

- Operations and Operational Planning
  - Sharing information for operational planning purposes is essential to fully understanding generator availability risks in the season ahead.
  - Formalized communication and coordination with the gas pipeline and supply industry during extreme events are needed.
  - System operators will need access to sufficient flexible resources to mitigate the added uncertainty associated with natural gas fuel risks, including those introduced by interruptible gas transportation service.<sup>10</sup>

Unique characteristics in each region of the country heavily influence the level of interdependency between both industries and need to be taken into account in determining and clarifying the communications needed for information and data exchange between the gas and electric industries supporting reliable service and effective operation planning.

NERC also supports protecting against undue discrimination in the areas of gas and electric communication, code of conduct, and market sensitivities.

#### **B. Permissible Disclosure of Non-Public, Operational Information**

In the NOPR, the Commission proposed changes to 18 C.F.R. Sections 38.3(a) and 284.12(b)(4) to “authorize public utilities providing transmission service and natural gas pipelines to share non-public, operational information when such information is for the purpose of promoting reliable service or operational planning.”<sup>11</sup>

NERC supports the Commission’s proposal to address the sharing of information between electric transmission system and natural gas pipeline operators. Based on its extensive study of both industries and stakeholder discussions with electric and natural gas operators, NERC determined that transmission operators could make better informed operating decisions, particularly during seasonal peak electric system conditions. In particular, if they have the

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<sup>10</sup> *Id.* at 88-91.

<sup>11</sup> NOPR at P 23.

ability to obtain information about pipeline flows and pipeline system conditions – in coordination with pipeline system operators – and assess the electric reliability risk accordingly. Further, these types of information should be shared bilaterally on a timely basis between respective transmission and pipeline operators to enable appropriate coordination and risk-based decisions. Electric vulnerabilities related to natural gas fuel disruptions will be best addressed when real-time, day-ahead, and season-ahead gas flow information and data is exchanged and made available to transmission system operators.

The ability for transmission operators and gas-fired generators to access real-time fuel availability information and assess how fuel supplies potentially affect large amounts of electric generation is essential to ensure electric system reliability. One example of such information relates to the ability to manage the respective risks associated with large and fast generation or load ramps. Ramps are characterized by sharp changes in generation or load over short time periods and present operational difficulties to transmission operators, and which can be amplified during different seasonal conditions encountered when one or both electric and gas systems are anticipating operations under peak or stressed conditions. Unexpected ramp events from variable generation, such as lower probability situations when much of the wind or solar fleet is being simultaneously affected by a large weather event, can affect operators' ability to manage reserves and keep power systems within reliability operating specifications.

Similarly, significant curtailments or interruptions in the natural gas supply and transportation systems can have an immediate effect on natural gas-fired generation and BPS reliability, especially during the peak-demand hours. The ability to foresee these conditions give electric system operators the opportunity to dispatch additional resources and coordinate additional power transfers with the neighboring systems to ensure reliability.

The Commission requested comments regarding a sample list of “non-public, operational information that can be shared in order to provide flexibility to individual operators.”<sup>12</sup> NERC supports the list of non-public, operational information sharing described in the NOPR and provides specific comments on the following three examples.

*1. Actual and projected gas transportation restrictions to electric generators*

NERC notes that the term “restrictions” used in this example may require clarification and suggests that terminology consistent with that used by natural gas pipeline operators would be useful. For example, the two restrictive conditions on the natural gas pipeline system that could have the potential to impact large amounts of generation are interruptions and curtailments. NERC suggests that the terms interruptions and curtailments be used instead of restrictions.

*2. Nominated and scheduled quantities of shippers who are or who supply gas-fired generators*

NERC supports the sharing of information related to shippers’ nominated and scheduled quantities of natural gas supplies to gas-fired generators. This information would provide day-ahead observability and confirmation of natural gas availability for electric generation within a system balancing area. System operators would be able to assess resource options and flexibility, as well as the ability of the respective electric and gas systems to manage and mitigate potential generator losses.

*3. Scheduled dates and duration of generator, pipeline, and transmission maintenance and planned outages*

NERC supports the exchange of scheduled dates and duration of generator, pipeline, and transmission maintenance and planned outages. This information would provide season-ahead observability for operations planning purposes and the risk of potential disruptions would be minimized by enhanced coordination and information exchange regarding gas and electric

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<sup>12</sup> NOPR at PP 23-24.

planned and maintenance schedules. In particular, seasonal review of facility outages can help system operators and pipeline operators in identifying and addressing potential operational risks.

In the NOPR, the Commission requested comments on “whether additional regulations are needed to require a generator to share necessary information with its electric transmission operator to inform it of the possibility that the generator’s natural gas service may be disrupted.”<sup>13</sup> NERC notes that many natural gas-fired generators have measures in place to manage natural gas interruptions and curtailments. These measures include burning a secondary fuel (if oil fuel backup is on-site and available) or using other on-site storage of liquefied natural gas (“LNG”), local area natural gas storage, or off-site LNG delivery. Therefore, transmission operators should not base operating decisions solely on the exchange of information with the natural gas pipelines but should also consider decisions from the individual generator owners, who have the most complete and up-to-date information about their generator fleet’s availability and fuel supplies. Sharing of this information must be timely to ensure the system operator can react to impending issues and adjust the system accordingly.

The Commission also requested comments on “whether the proposed rule should require that, to the extent the non-public, operational information exchanged between transmission operators involves customer-specific information (such as information about individual generators), the transmission operators must seek to include the customer as part of a three-way communication.” NERC supports the coordination and sharing of information between all affected parties.

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<sup>13</sup> NOPR at P 25.

Finally, NERC notes that in the “Summary” section of the NOPR, the Commission identifies “...interstate natural gas pipelines and public utilities that own, operate, or control facilities used for the transmission of electric energy...”<sup>14</sup> However, elsewhere in the NOPR<sup>15</sup> the Commission identifies “electric transmission operators” as “the crucial interconnection between natural gas pipelines.” Additionally, “public utilities” may own the electric transmission within a given area. Yet, in areas where an Independent System Operator or a Regional Transmission Organization (ISO/RTO) operates the electric transmission system, it is the ISO/RTO that will require this information. NERC proposes that the Commission consider using existing and established terminology (*i.e.*, Transmission Operator, as defined by the NERC Glossary)<sup>16</sup> to identify entities affected by the proposed rules. By using existing terminology, roles will be clearly aligned with existing reliability functions.

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<sup>14</sup> NOPR at 1.

<sup>15</sup> *Id.* at P 2.

<sup>16</sup> See Glossary of Terms Used in NERC Reliability Standards at 71 (“The entity responsible for the reliability of its “local” transmission system, and that operates or directs the operations of the transmission facilities.”) available at: [http://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary\\_of\\_Terms.pdf](http://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary_of_Terms.pdf). See also Reliability Functional Model Technical Document, Version 5, at 15 (“The Transmission Operator operates or directs the operation of transmission facilities, and maintains local-area reliability, that is, the reliability of the system and area for which the Transmission Operator has responsibility.”) available at: [http://www.nerc.com/files/FM\\_Technical\\_Document\\_V5\\_2009Dec1.pdf](http://www.nerc.com/files/FM_Technical_Document_V5_2009Dec1.pdf).

**IV. Conclusion**

For the reasons stated above, NERC respectfully requests that the Commission issue an order in accordance with the comments herein.

Respectfully submitted,

/s/ Rebecca J. Michael

Charles A. Berardesco  
Senior Vice President and General Counsel  
Rebecca J. Michael  
Associate General Counsel for Corporate  
and Regulatory Matters  
Willie L. Phillips  
Senior Counsel  
North American Electric Reliability  
Corporation  
1325 G Street, N.W., Suite 600  
Washington, D.C. 20005  
(202) 400-3000  
(202) 644-8099– facsimile  
[charlie.berardesco@nerc.net](mailto:charlie.berardesco@nerc.net)  
[rebecca.michael@nerc.net](mailto:rebecca.michael@nerc.net)  
[willie.phillips@nerc.net](mailto:willie.phillips@nerc.net)

*Counsel for North American Electric  
Reliability Corporation*

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